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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/603,247	06/23/2000	Raanan Liebermann	00-422RE	9739
759	90 11/16/2004	5	EXAM	INER
Bachman & LaPointe PC 900 Chapel Street			WOO, STELLA L	
Suite 1201	Ci		ART UNIT	PAPER NUMBER
New Haven, CT 06510-2802			2643	12
		DATE MAIL ED: 11/16/2004		

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## BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/603,247

Filing Date: June 23, 2000

Appellant(s): LIEBERMANN, RAANAN

Barry L. Kelmachter For Appellant

**EXAMINER'S ANSWER** 

This is in response to the appeal brief filed July 19, 2004.

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#### (1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

#### (2) Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

#### (3) Status of Claims

The statement of the status of the claims contained in the brief is incorrect. A correct statement of the status of the claims is as follows:

This appeal involves claims 33-38, 40-45.

Claims 1-32 and 46 are allowed.

Claim 39 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### (4) Status of Amendments After Final

No amendment after final has been filed.

#### (5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

#### (6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is substantially correct. The changes are as follows:

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- 1. Claims 33-35 are rejected under 35 USC 251 as being an improper recapture of broadened claimed subject matter surrendered in the application for patent upon which the present reissue is based.
- 2. Claims 33, 35-36, 38, 40, 42-44 are rejected under 35 USC 102(b) as being anticipated by Sakiyama et al. (US 5,659,764).
- 3. Claims 34, 37 and 45 are rejected under 35 USC 103(a) as being unpatentable over Sakiyama et al. in view of Wycherley et al. (US 5,163,081).

#### **NEW GROUND OF REJECTION**

4. Claim 41 is rejected under Sakiyama et al. in view of King (US 4,903,290).

#### (7) Grouping of Claims

Appellant's brief includes a statement that claims 33-45 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

#### (8) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

#### (9) Prior Art of Record

5,659,764	Sakiyama et al.	8-1997
5,163,081	Wycherley et al.	11-1992
4,903,290	King	2-1990

#### (10) Grounds of Rejection

The following grounds of rejection are applicable to the appealed claims:

1. Claim 33 is rejected under 35 U.S.C. 251 as being an improper recapture of broadened claimed subject matter surrendered in the application for the patent upon which the present

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reissue is based. See Hester Industries, Inc. v. Stein, Inc., 142 F.3d 1472, 46 USPQ2d 1641 (Fed. Cir. 1998); In re Clement, 131 F.3d 1464 45 USPQ2d 1161 (Fed. Cir. 1997); Ball Corp. v. United States, 729 F.2d 1429, 1436, 221 USPQ 289, 295 (Fed. Cir. 1984). A broadening aspect is present in the reissue which was not present in the application for patent. The record of the application for the patent shows that the broadening aspect (in the reissue) relates to subject matter that applicant previously surrendered during the prosecution of the application.

Accordingly, the narrow scope of the claims in the patent was not an error within the meaning of 35 U.S.C. 251, and the broader scope surrendered in the application for the patent cannot be recaptured by the filing of the present reissue application.

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The first step in applying the recapture rule is to determine whether and in what aspect the reissue claims are broader than the patent claims. Reissue claim 33 is broader than patent claim 1 by the omission of "a video apparatus for visually observing the images of facial and hand and finger signing motions of a person and converting the observed signing motions into digital identifiers" and "means for translating said digital identifiers of said observed signing motions into words and phrases." This omission provides a broadening aspect in reissue claim 33 as compared to claim 1 of the patent.

The second step is to determine whether the broader aspects of the reissue claims relate to surrendered subject matter. To determine whether the Appellant surrendered particular subject matter, we look to the prosecution history of the original application for arguments and changes to the claims made in an effort to overcome a prior art rejection. On page 2 of the Amendment filed April 1, 1998, Appellant amended claim 1 by adding "visually observing the images of facial and hand and finger signing motions of a deaf person and converting the observed signing

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motions into digital identifiers," and "translating said digital identifiers of said observed signing motions into words and phrases" (underlining shows added subject matter). The limitations omitted in the reissue claim 33 were added to the original application claim 1 for the purpose of making the claim allowable over a rejection made in the application (see pages 6-8 of the Amendment filed April 1, 1998). Moreover, the omitted limitations were repeatedly argued in the original application as defining over the prior art rejection (see pages 6-8 of the Amendment filed April 1, 1998, the Interview Summary of a personal interview conducted on February 3, 1999, and pages 2-6 of the Amendment filed February 23, 1999). These repeated arguments constitute an admission by Appellant that the limitations were necessary to overcome the prior art. Thus, the omitted limitations relate to subject matter previously surrendered in the original application.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 33, 35-36, 38, 40, 42-44 are rejected under 35 U.S.C. 102(e) as being anticipated by Sakiyama et al. (US 5,659,764, hereinafter "Sakiyama").

Regarding claim 33, Sakiyama discloses an electronic communication system for the hearing impaired (note Fig. 22) comprising:

a receiver (microphone 1 and voice recognition unit 2);

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means for translating (voice language/sign language translation unit 5' and sign language CG animation generation unit 6 with text display; col. 21, lines 14-30; Figure 23);

means for outputting (text is displayed on monitor 7 used by the hearing impaired person; Figure 23);

said device including means for receiving words and phrases from the hearing impaired person (video camera 21 and sign language word recognition unit 23; col. 16, lines 25-28); transforming means (signal language/voice language conversion unit 25); and

means for outputting (aurally normal person side display unit 27 with monitor 28).

Regarding claim 35, Sakiyama provides for a video camera 21 which can capture signing motions (Figure 22; col. 16, lines 25-28).

Regarding claim 36, Sakiyama provides for converting captured signing motions into a plurality of identifiers (captured signing motions are converted into recognized words via signal language word recognition unit 23 and a standard sign language pattern storage 24; col. 15, lines 8-13; col. 16, lines 7-12) and means for transmitting said plurality of identifiers to said translating means (the recognized word series is delivered to sign language/voice language conversion unit 25 for translation into a sentence in spoken form; col. 15, lines 13-21; col. 16, lines 29-37).

Regarding claim 38, the sign language/voice language conversion unit 25 correlates the identified words with a word dictionary 26 and generates a sentence by supplementing particles and inflections (col. 16, lines 32-37).

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Regarding claim 40, text inputted using a keyboard 3 is converted into a sign language word series via sign language conversion unit 5', which is then converted into animated images via a sign language CG animation generating unit 6 (col. 20, lines 31-51).

Regarding claims 42-43, the terminal used by the hearing impaired person includes computer 11 (col. 9, lines 1-14) which can be considered as portable in that it can be physically moved to another location.

Regarding claim 44, the terminal used by the hearing impaired person includes a video camera 21 which captures all motions performed by the hearing impaired person, which would include facial, hand and finger signing motions (col. 15, lines 4-7; col. 16, lines 25-28, 46-48; col. 18, lines 35-38; Figure 32B, images 2119a, 2119b, 2119c).

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 34, 37, 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakiyama in view of Wycherley et al. (US 5,163,081, hereinafter "Wycherley").

Sakiyama differs from claims 34, 37 and 45 in that it does not specify the translating taking place at a location remote from either party or communication taking place over telephone lines. However, as taught by Wycherley (note Fig. 1), it is well known to centralize the translation process (central station 200 provides translation services; col. 3, lines 43-64) in order to convert communications between an aurally normal person and a remotely located aurally impaired person as well as to provide communications over a telephone network

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(telecommunications network 100; col. 2, lines 44-68). It would have been obvious to an artisan of ordinary skill at the time of invention to incorporate such communication over telephone lines and centralized translation, as taught by Wycherley, within the system of Sakiyama in order to allow communications between parties at remote locations.

#### **NEW GROUND OF REJECTION**

4. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sakiyama in view of King (US 4,903,290).

Sakiyama differs from claim 41 in that it does not teach the terminal being located in a kiosk. However, King teaches the desirability of placing a communications device for the hearing impaired within a public pay booth or kiosk (see Figure 1; col. 1, line 67 – col. 2, line 2; col. 2, lines 33-47) such that it would have been obvious to an artisan of ordinary skill at the time of invention to incorporate the terminal of Sakiyama within a kiosk, as taught by King, in order to provide hearing impaired communication services within a public environment.

#### (11) Response to Argument

#### 1. Rejection of claim 33 under 35 USC 251

Appellant argues that "the Examiner's analysis is flawed because the Examiner begins from the wrong point – the allowed claims. The analysis should have commenced with the rejected claims, not the allowed claims." Appellant then analyzes reissue claim 33 with claim 1 as it appears prior to the October 1, 1997 office action.

However, the examiner contends that in Clement, 131 F.3d at 1468-1469, 45 USPQ2d at 1164, the Court of Appeals for the Federal Circuit set forth a two-step test in applying the recapture rule. The first step involves determining whether and in what aspect the reissue claims

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are broader than the *patent* claims, i.e. allowed claims. As described in the above rejection, reissue claim 33 is broader than patent claim 1 by the omission of "a video apparatus for visually observing the images of facial and hand and finger signing motions of a person and converting the observed signing motions into digital identifiers" and "means for translating said digital identifiers of said observed signing motions into words and phrases." This omission provides a broadening aspect in reissue claim 33 as compared to claim 1 of the patent.

The second step is to determine whether the broader aspects of the reissue claims related to surrendered subject matter by looking to the prosecution history for arguments and changes to the claims made in an effort to overcome a prior art rejection. As described in the above rejection, on page 2 of the Amendment filed April 1, 1998, the appellant amended claim 1 by adding "visually observing the images of facial and hand and finger signing motions of a deaf person and converting the observed signing motions into digital identifiers," and "translating said digital identifiers of said observed signing motions into words and phrases" (underlining shows added subject matter). The limitations omitted in the reissue claim 33 were added to the original application claim 1 for the purpose of making the claim allowable over a rejection made in the application (see remarks on pages 6-8 of the Amendment filed April 1, 1998). Moreover, the omitted limitations were repeatedly argued in the original application as defining over the prior art rejection (see pages 6-8 of the Amendment filed April 1, 1998, the Interview Summary of a personal interview conducted on February 3, 1999, and pages 2-6 of the Amendment filed February 23, 1999). These repeated arguments constitute an admission by the appellant that the limitations were necessary to overcome the prior art. Thus, the omitted limitations relate to subject matter previously surrendered in the original application.

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# 2. Rejection of claims 33, 35-36, 38, 40, 43-44 under 35 U.S.C. 102(e) as being anticipated by Sakiyama.

Appellant argues that "claim 33 as presented is allowable over Sakiyama et al. because the cited and applied reference does not disclose any 'means for outputting textual material for display on a device utilized by a hearing impaired person' which device (containing said display) also includes 'means for receiving words and phrases from the hearing impaired person'" and that in the Sakiyama et al. system, "the camera and gloves do not form part of the monitor (7) and thus do not meet the included limitation of claim 33."

However, Claim 33 does not require that the camera (means for receiving) form a part of the monitor (means for outputting). Rather, claim 33 recites a device utilized by a hearing impaired person which includes a means for outputting and a means for receiving (claim 33, lines 9-13). In Sakiyama, the general apparatus depicted in Figure 22 can be considered as the "device utilized by a hearing impaired person" and includes an aurally handicapped person side display unit 36, monitor 7, mouse 38, video camera 21, etc. The examiner contends that this apparatus is clearly a device which includes a means for outputting textual material for display (the apparatus includes a monitor 7 which displays translated spoken words and phrases in the form of text; see Figure 23). The apparatus (which includes a monitor 7) depicted in Figure 22 also includes a means for receiving words and phrases from the hearing impaired person (the apparatus includes a video camera 21 which receives words and phrases from the aurally handicapped person by capturing signing motions; col. 16, lines 26-28).

Regarding claim 36, Sakiyama provides for converting captured signing motions into a plurality of identifiers (captured signing motions are converted into recognized words via signal

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language word recognition unit 23 and a standard sign language pattern storage 24; col. 15, lines 8-13; col. 16, lines 7-12) and means for transmitting said plurality of identifiers to said translating means (the recognized word series is delivered to sign language/voice language conversion unit 25 for translation into a sentence in spoken form; col. 15, lines 13-21; col. 16, lines 29-37).

Regarding claim 38, the sign language/voice language conversion unit 25 correlates the identified words with a word dictionary 26 and generates a sentence by supplementing particles and inflections (col. 16, lines 32-37).

Regarding claim 40, text inputted using a keyboard 3 is converted into a sign language word series via sign language conversion unit 5', which is then converted into animated images via a sign language CG animation generating unit 6 (col. 20, lines 31-51).

Regarding claim 42, the terminal used by the hearing impaired person includes computer 11 (col. 9, lines 1-14) which can be considered as portable in that it can be physically moved to another location.

3. Rejection of claims 34, 37 and 45 under 35 U.S.C. 103(a) as being unpatentable over Sakiyama in view of Wycherley.

Appellant argues that "there is nothing in Wycherley et al. which would motivate one of ordinary skill in the art to locate any translating means in Sakiyama et al. in a station remote from the hearing impaired person and hearing person" and Sakiyama "does not contain any telephone lines and why one would want to add them escapes Appellant."

In response to the appellant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or

modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

In this case, the examiner contends that Wycherley clearly teaches the desirability of using a telephone network (100) for the purpose of allowing communication between a hearing impaired individual with remotely located hearing individual who is served by the telephone network (col. 1, lines 6-10; col. 2, lines 64-68). Sakiyama similarly discloses a system which allows a hearing impaired individual to communicate with a hearing individual but does not teach the use of a telephone line. The examiner maintains that it would have been obvious to an artisan of ordinary skill to incorporate the use of at least one telephone line, as taught by Wycherley, within the system of Sakiyama so that communication can take place between individuals from remote locations.

Wycherley further teaches the desirability of location the translating means at a station remote from the hearing impaired person and the hearing person (central station 200 provides TDD-to-voice and voice-to-TDD translation; col. 8, lines 1-11) for the purpose of providing translation service to any telephone or hearing-impaired subscriber (TDD user) with a telephone connection. It would have been obvious to an artisan of ordinary skill to locate the translations services at a central station, remote from both the hearing impaired user and the hearing person, as taught by Wycherley, so that translations services can be provided to individuals without requiring special translation equipment at each individual location.

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Under 37 CFR 41.39, appellant must, within two months from the date of the examiner's answer, file either: (1) a request that prosecution be reopened by filing a reply under 37 CFR 1.111; or (2) a request that the appeal be maintained by filing a reply brief under 37 CFR 41.41, to address each new ground of rejection to avoid *sua sponte* dismissal of the appeal as to the claims subject to the new ground of rejection.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Stella L. Woo Primary Examiner Art Unit 2643

Stella Woo October 30, 2004

Conferees:

wris Kuniz

Forester Isan

March Zood

Wing Chan

Bachman & LaPointe PC

900 Chapel Street

**Suite 1201** 

New Haven, CT 06510-2802